



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/606,732	06/29/2000	Robert Leonard Munson	8285/374	6694

757 7590 06/14/2005

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610

EXAMINER

NG, CHRISTINE Y

ART UNIT PAPER NUMBER

2663

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/606,732

Applicant(s)

MUNSON ET AL.

Examiner

Christine Ng

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-45 and 49-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43-45 and 49-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 43 and 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,038,305 to McAllister et al.

Referring to claim 43, Forrest discloses in Figure 2 a database (250) for routing telephone calls directed to on-line computer data services (ISP 260) from an originating central office (SSP-A 210) to a terminating central office (SSP-B 220). The database comprises:

A routing table (in database 250) comprising a plurality of telephone numbers associated with dial-up access lines to on-line computer data services (ISP 260) and a plurality of trunk route identifiers corresponding to a plurality of trunk routes (Elements 270) for connecting the plurality of originating central offices (SSP-A 210) with the terminating central office (SSP-B 220). The SCP 240 analyzes the calling number and the called ISP number and compares them with "a list of calling numbers, ISP numbers and associated trunklines, which is stored in a database 250, and identifies the dedicated ISP trunkline(s) which will be used to route the call" to an ISP, thereby connecting SSP-A 210 with SSP-B 220. Refer to Column 4, lines 42-48. Furthermore,

Art Unit: 2663

ISPs "provide different local phone numbers for each city where they operate" (Column 2, line 64-66).

Service logic (SCP 240) to identify a trunk route (Element 270) for connecting the originating central office (SSP-A 210) with the terminating central office (SSP-B 220).

The SCP 240 determines the ISP trunklines to route the call from SSP-A 210 to SSP-B 220. Refer to Column 4, lines 42-48.

Wherein the plurality of trunk routes (Elements 270) are dedicated exclusively for carrying data transmissions. Calls to ISPs 260 can then be routed on "reserved trunklines 270, thus separating ISP traffic from normal voice traffic" (Column 4, lines 31-33).

Forrest does not disclose that the routing table includes a plurality of point codes that correspond to a plurality of originating central offices, wherein each point code uniquely identifies one of the originating central offices.

McAllister et al discloses in Figure 1 a plurality of central offices 11_1 - 11_N that are each associated with a point code. The point codes are used for messaging between different central offices. For example, in sending an initial address message IAM from central office 11_1 to central office 11_N , the IAM message includes the destination point code of the terminating central office 11_N and the originating point code of the originating central office 11_1 . Conversely, when sending an address complete message ACM back to central office 11_1 , the ACM message includes the destination point code of central office 11_1 and the originating point code of terminating central office 11_N . Each originating and destination point code is uniquely assigned to each central office 11_1 to

Art Unit: 2663

11_N in order to facilitate message routing to the correct central office. Refer to Column 21, line 46 to Column 22, line 50. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the routing table includes a plurality of point codes that correspond to a plurality of originating central offices, wherein each point code uniquely identifies one of the originating central offices; the motivation being that a point code can be used to distinguish between the originating central offices and determine a route for messaging between the source and destination central offices.

Referring to claim 49, refer to the rejection of claim 43.

The network also comprises a circuit-switch (SSP-B 220) at the terminating central office (SSP-B 220), the circuit switch (SSP-B 220) being operative to connect the data trunk (Elements 270) with the on-line data services (ISP 260). Refer to Column 4, lines 48-53.

Referring to claim 50, Forrest discloses in Figure 2 that the database (Element 250) is operative to identify telephone calls to on-line data services (ISP 260) in response to an advanced intelligent network query from the SSP. Refer to Column 1, lines 56-59 and Column 4, lines 34-55.

Referring to claim 51, Forrest discloses in Figure 2 that the database (Element 250) is operative to identify the trunk (Elements 270) for connecting the originating central office (SSP-A 210) and the terminating central office (SSP-B 220). The SCP 240 analyzes the calling number and the called ISP number and compares them with "a

Art Unit: 2663

list of calling numbers, ISP numbers and associated trunklines, which is stored in a database 250, and identifies the dedicated ISP trunklines) which will be used to route the call" to an ISP, thereby connecting SSP-A 210 with SSP-B 220. Refer to Column 4, lines 42-48.

3. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,038,305 to McAllister et al, and in further view of U.S. Patent No. 6,026,151 to Bauer et al.

Forrest and McAllister et al do not disclose that the routing table is operative to identify the plurality of telephone numbers associated with dial-up access lines to on-line data services by a ten digit NPA-NXX-XXXX.

Bauer et al disclose in Figure 5 a routing table, ISP database, that includes records for a plurality of ISPs and corresponding network interface locations (NPA-NXX). The ISP database also includes for each ISP a routing number 310 and alternate routing numbers 320. Refer to Column 6, lines 35-50. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the routing table is operative to identify the plurality of telephone numbers associated with dial-up access lines to on-line data services by a ten digit NPA-NXX-XXXX; the motivation being so that the system can utilize the table to determine for a user the nearest ISP through which the user can access the Internet.

4. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,038,305 to McAllister et al, and in further view of U.S. Patent No. 5,740,239 to Bhagat et al.

Forrest and McAllister et al do not disclose that the service logic is operative to identify the trunk route by identifying a ten-digit NPA-NXX-XXXX telephone number associated with the trunk route to the terminating central office.

Bhagat et al disclose in Figure 16 that the destination switch 733 utilizes the dialed NPA-NXX-XXXX telephone number to obtain "the identity or identities of the carrier(s) and end office(s) of the local carrier serving the called customer". Refer to Column 8, line 20 to Column 9, line 2. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the service logic is operative to identify the trunk route by identifying a ten-digit NPA-NXX-XXXX telephone number associated with the trunk route to the terminating central office; the motivation being so that the system, based on the called NPA-NXX-XXX telephone number, can determine the trunk route and end office that is serving the called customer.

5. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,038,305 to McAllister et al, and in further view of U.S. Patent No. 5,680,446 to Fleischer et al.

Forrest and McAllister et al do not disclose that the database is further operative to identify the data trunk for connecting the originating central office to the terminating central office by indexing a dialed telephone number and a point code identifying the originating central office in the routing table.

Fleischer et al disclose in Figure 7 that a database, an SCP (Element 30), is operative to identify the data trunk (route office number) for connecting the originating

Art Unit: 2663

central office and the terminating central office by indexing a dialed telephone number (NPA-NXX) and a point code (SSP 12, SSP 14 or SSP 16) identifying the originating central office in a routing table (Instate NPA-NXX Trunk Routing Table). Refer to Column 5, lines 56-60; Column 10, lines 36-41 and Column 19, lines 14-39. For each terminating number in the table, a route office number associated with each SSP is used to "identify the trunk on which to route the telephone call for termination" (Column 19, lines 31-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a database to identify the data trunk for connecting the originating central office and the terminating central office by indexing the dialed telephone number and a point code in order to select a trunk group for the SSP to use based on the terminating number.

6. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,038,305 to McAllister et al, and in further view of U.S. Patent No. 6,097,719 to Benash et al.

Forrest and McAllister et al do not disclose that the circuit switch consolidates access to on-line data services within a LATA.

Benash et al show in Figure 5 that a circuit switch (Element 12) consolidates access to on-line data services (Element 40) using a LATA hub (Element 10). The disclosed LATA hub serves the customers of the ISPs and provide for the "collection, concentration and management of the customers traffic within a LATA" (Column 9, lines 56-57) in a defined geographic region. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the circuit

switch consolidates access to on-line data services within a LATA in order to collect, concentrate and manage customer traffic in a defined geographic region.

7. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,038,305 to McAllister et al, and in further view of U.S. Patent No. 6,047,051 to Ginzboorg et al.

Forrest and McAllister et al do not disclose a primary rate interface for connecting the circuit-switch with the on-line data services.

Ginzboorg et al disclose in Figure 2 a network switch in the PSTN that is connected to an Internet Service Provider via an ISDN primary access interface (PRI). Refer to Column 4, lines 43-61. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a primary rate interface for connecting the circuit-switch with the on-line data services; the motivation being that a primary rate interface is a service of ISDN that accommodates digital transmission over telephone wire at a faster service rate than modems; the primary rate interface also services larger users as compared to the basic rate interface.

8. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,038,305 to McAllister et al, and in further view of U.S. Patent No. 5,805,587 to Norris et al.

Forrest and McAllister et al do not disclose that the system further comprises a T1/DS1 line for connecting the circuit switch with the on-line data services.

Norris et al disclose in Figure 1 a T1 line (Element 150) connecting a circuit switch (Element 105) with on-line data services (Element 200). T1 carrier lines each

have 24 communication channels with at least one channel serving as a signaling channel. The signaling channel allows the circuit switch (Element 105) and the on-line data services (Element 200) to set up communication between the data terminal (DT1) and the Internet (Element 300). Refer to Column 2, lines 31-45. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a T1 line for connecting the circuit switch with the on-line data services in order to set up communication between a data terminal and the Internet.

9. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,038,305 to McAllister et al, and in further view of U.S. Patent No. 6,205,134 to Jordan et al.

Forrest and McAllister et al do not disclose that the data trunk comprises a T1 trunk line.

Jordan et al teach that T1 is the standard form of trunk line, which provides 24 simultaneous channels to carry audio telephone signal and a limited degree of signaling information including information on reserving a channel, making a call on a channel, and transferring a call. Refer to Column 1, lines 49-55. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the data trunk comprises a T1 trunk line since T1 carriers carry audio telephone signal and signaling information.

10. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,038,305 to McAllister et al, and in further view of U.S. Patent No. 6,324,173 to Deschaine et al.

Forrest and McAllister et al do not disclose that the circuit-switch is dedicated to received only calls to on-line data services.

Deschaine et al disclose in Figure 1 a telecommunications switched network 10 including a local PSTN 12 and an Internet data network 14. A circuit-switch (Internet routing element 24) is connected to the central offices (local tandem switches 18 or end offices 16) and is operative to connect the data trunks (modem trunks 30) with on-line data services (Internet service providers). Internet calls are re-routed onto modem trunks 30 from local tandem switches 18 or end offices 16 to the Internet routing element 24, which is dedicated to transferring calls to Internet service providers. Refer to Column 3, line 23 to Column 4, line 17; and Column 13, lines 1-10. Although Deschaine et al do not specifically disclose that the Internet routing element is a circuit-switch, Deschaine et al discloses that the Internet data network 14, where the Internet routing element 24 is located, is in a telecommunications switched network 10. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a circuit-switch is dedicated to receive only calls to on-line data services; the motivation being to divert Internet calls to dedicated trunks using a dedicated circuit-switch, thereby relieving the congestion on the PSTN network caused by Internet calls. Refer to Column 1, lines 53-66.

11. Claims 58-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over by U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,324,173 to Deschaine et al.

Referring to claim 58, Forrest discloses in Figure 2 a network for routing telephone calls directed to on-line computer data services (ISP 260) from an originating central office (SSP-A 210) to a terminating central office (SSP-B 220). The network comprises:

A database (Element 250) in communication with the originating central office (SSP-A 210), the database including a routing table that includes (i) a plurality of telephone numbers associated with dial-up access lines to on-line computer data services (ISP 260); and (ii) a plurality of trunk route identifiers corresponding to a plurality of trunk routes (Elements 270) for connecting the plurality of originating central offices (SSP-A 210) with the terminating central office (SSP-B 220), the database being operative to identify telephone calls to on-line computer data services (ISP 260). The SCP 240 analyzes the calling number and the called ISP number and compares them with "a list of calling numbers, ISP numbers and associated trunklines, which is stored in a database 250, and identifies the dedicated ISP trunkline(s) which will be used to route the call" to an ISP, thereby connecting SSP-A 210 with SSP-B 220. Refer to Column 4, lines 42-48. Furthermore, ISPs "provide different local phone numbers for each city where they operate" (Column 2, line 64-66).

A data trunk (Element 270) for connecting the originating central office (SSP-A 210) and the terminating central office (SSP-B 220), the data trunk being dedicated exclusively for carry data transmissions. Calls to ISPs 260 are routed on "reserved trunklines 270, thus separating ISP traffic from normal voice traffic" (Column 4, lines 31-33).

Forrest does not disclose a circuit-switch at the terminating central office, the circuit-switch being operative to connect the data trunk with the on-line data services, where the circuit-switch is dedicated to receive only calls to on-line data services.

Deschaine et al disclose in Figure 1 a telecommunications switched network 10 including a local PSTN 12 and an Internet data network 14. A circuit-switch (Internet routing element 24) is connected to the central offices (local tandem switches 18 or end offices 16) and is operative to connect the data trunks (modem trunks 30) with on-line data services (Internet service providers). Internet calls are re-routed onto modem trunks 30 from local tandem switches 18 or end offices 16 to the Internet routing element 24, which is dedicated to transferring calls to Internet service providers. Refer to Column 3, line 23 to Column 4, line 17; and Column 13, lines 1-10. Although Deschaine et al do not specifically disclose that the Internet routing element is a circuit-switch, Deschaine et al discloses that the Internet data network 14, where the Internet routing element 24 is located, is in a telecommunications switched network 10. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a circuit-switch at the terminating central office, the circuit switch being operative to connect the data trunk with the on-line data services, where the circuit-switch is dedicated to receive only calls to on-line data services; the motivation being to divert Internet calls to dedicated trunks using a dedicated circuit-switch, thereby relieving the congestion on the PSTN network caused by Internet calls. Refer to Column 1, lines 53-66.

Referring to claim 59, refer to the rejection of claim 50.

Referring to claim 60, refer to the rejection of claim 51.

12. Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,324,173 to Deschaine et al, and in further view of U.S. Patent No. 5,680,446 to Fleischer et al. Refer to the rejection of claim 52.

13. Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,324,173 to Deschaine et al, and in further view of U.S. Patent No. 6,097,719 to Benash et al. Refer to the rejection of claim 53.

14. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,324,173 to Deschaine et al, and in further view of U.S. Patent No. 6,047,051 to Ginzboorg et al. Refer to the rejection of claim 54.

15. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,324,173 to Deschaine et al, and in further view of U.S. Patent No. 5,805,587 to Norris et al. Refer to the rejection of claim 55.

16. Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,084,875 to Forrest in view of U.S. Patent No. 6,324,173 to Deschaine et al, and in further view of U.S. Patent No. 6,205,134 to Jordan et al. Refer to the rejection of claim 56.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Ng whose telephone number is (571) 272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2663

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. Ng *CN*
June 8, 2005

Ricky Ngo
RICKY NGO
PRIMARY EXAMINER
6/12/05